

**IN THE CLAIMS:**

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 4, 6, 8, 14, and 17 and ADD new claims 24-27 in accordance with the following:

1. (PREVIOUSLY PRESENTED) A collaboration apparatus between information processing systems for allowing a plurality of information processing means including information processing means based on different architectures to collaborate with each other, the apparatus being implemented as an object to be operated singly, and comprising:

collaboration information storage means for storing information on a communication method between the information processing means as collaboration information among the plurality of information processing means;

role object generating means for generating a role object as an active role with respect to one of two information processing means to be collaborated, and a role object as a passive role with respect to the other; and

relating object generating means for referring to the collaboration information of the collaboration information storage means and generating a relating object that allows transaction communication to be performed in accordance with a communication method between the two information processing means to be collaborated, thereby allowing a collaboration between the role object as the active role and the role object as the passive role.

2. (CANCELLED)

3. (PREVIOUSLY PRESENTED) A collaboration apparatus between information processing systems according to claim 1, wherein the communication method is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.

4. (CURRENTLY AMENDED) A ~~collaboration~~ data perpetuation object apparatus between information processing systems for performing unified management of data managed in duplicate by a plurality of information processing means including information processing means based on different architectures, the apparatus being implemented as an object to be operated singly, and comprising:

information identification object generating means for generating an information identification object that determines information to be stored in a storage apparatus of each information processing means;

collaboration information storage means for storing information on a communication method between the information processing means as collaboration information among the plurality of information processing means;

role object generating means that generates a role object as an active role with respect to information processing means that is a data transmission origin, and a role object as a passive role with respect to information processing means that is a data transmission destination; and

relating object generating means for referring to the collaboration information of the collaboration information storage means and generating a relating object for transmitting information to be stored in a storage apparatus of each information processing means between the role objects, in accordance with a communication method between the information processing means that is a data transmission origin and the information processing means that is a data transmission destination.

5. (CANCELLED)

6. (CURRENTLY AMENDED) A ~~collaboration~~ data perpetuation object collaboration apparatus between information processing systems according to claim 4, wherein the communication method is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.

7. (PREVIOUSLY PRESENTED) An integrated information processing system including a plurality of information processing means, the plurality of information processing means including information processing means based on different architectures, the system comprising:

collaboration information storage means for storing information on a communication method between the information processing means as collaboration information among the plurality of information processing means; and

a collaboration apparatus between information processing systems for referring to the collaboration information of the collaboration information storage means and allowing the information processing means to collaborate with each other,

the apparatus being implemented as an object to be operated singly, and comprising:

role object generating means for generating a role object as an active role with respect to one of two information processing means to be collaborated, and a role object as a passive role with respect to the other; and

relating object generating means for referring to the collaboration information of the collaboration information storage means and generates a relating object that allows transaction communication to be performed in accordance with a communication method between the two information processing means to be collaborated, thereby allowing a collaboration between the role object as the active role and the role object as the passive role.

8. (CURRENTLY AMENDED) An integrated information processing system including a plurality of information processing means, the plurality of information processing means including information processing means based on different architectures, the system comprising:

collaboration information storage means for storing information on a communication method between the information processing means as collaboration information among the plurality of information processing means; and

a collaboration data perpetuation object apparatus between information processing systems for referring to the collaboration information of the collaboration information storage means and performing unified management of data managed in duplicate by the information processing means, the collaboration data perpetuation object apparatus being implemented as an object to be operated singly, and comprising:

information identification object generating means for generating an information identification object that determines information to be stored in a storage apparatus of each information processing means;

role object generating means for generating a role object as an active role with respect to information processing means that is a data transmission origin, and a role object as a passive role with respect to information processing means that is a data transmission

destination; and

relating object generating means for referring to the collaboration information of the collaboration information storage means and generating a relating object for transmitting information to be stored in a storage apparatus of each information processing means between the role objects in accordance with a communication system between the information processing means that is a data transmission origin and the information processing means that is a data transmission destination.

9. (PREVIOUSLY PRESENTED) A computer-readable recording medium storing a collaboration program between information processing systems that allows a computer to execute, as an object to be operated singly, processing of allowing a plurality of information processing means including information processing means based on different architectures to collaborate with each other, the program allowing a computer to execute:

processing of generating a role object as an active role with respect to one of two information processing means to be collaborated, and generating a role object as a passive role with respect to the other; and

processing of referring to collaboration information including information on a communication method between the information processing means and generating a relating object that allows transaction communication to be performed in accordance with the communication method between the two information processing means to be collaborated.

10. (PREVIOUSLY PRESENTED) A computer-readable recording medium storing a collaboration program between information processing systems that allows a computer to execute, as a perpetuation object to be operated singly, processing of performing unified management of data managed in duplicate by a plurality of information processing means including information processing means based on different architectures, the program allowing a computer to execute:

processing of generating an information identification object that determines information to be stored in a storage apparatus of each information processing means;

processing of generating a role object as an active role with respect to information processing means that is a data transmission origin, and generating a role object as a passive role with respect to information processing means that is a data transmission destination; and

processing of referring to collaboration information including information on a communication method between the information processing means and generating a relating object for transmitting information to be stored in a storage apparatus of each information processing means between the role objects in accordance with the communication method between the information processing means that is a data transmission origin, and information processing means that is a data transmission destination.

11. (PREVIOUSLY PRESENTED) A method of collaborating a plurality of information processors based on different architectures, the method being carried out by an object to be operated singly, and comprising:

storing information on a communication method between the information processors as collaboration information among the plurality of information processors;

generating a role object as an active role with respect to one of the two information processors to be collaborated, and a role object as a passive role with respect to the other; and

referring to the stored collaboration information and generating a relating object that allows transaction communication to be performed in accordance with the communication method between the two information processing means to be collaborated, thereby allowing a collaboration between the role object as the active role and the role object as the passive role.

12. (CANCELLED)

13. (PREVIOUSLY PRESENTED) The method of collaborating according to claim 11, wherein the communication method is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.

14. (CURRENTLY AMENDED) A method of performing unified management of data managed in duplicate by a plurality of information processors based on different architecture, the method being carried out by an a perpetuation object to be operated singly, and comprising:

generating an information identification object that determines information to be stored in each of the plurality of information processors;

referring to collaboration information including information on a communication method between the information processors and generating a role object as an active role with respect to an information processor that is a data transmission origin, and a role object as a passive role

with respect to an information processor that is a data transmission destination; and  
referring to the stored collaboration information and generating a relating object for transmitting information to be stored in each of the information processors between the role objects, in accordance with a communication method between the information processor that is a data transmission origin and the information processor that is a data transmission destination.

15. (CANCELLED)

16. (PREVIOUSLY PRESENTED) The method according to claim 14, wherein the communication method is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.

17. (CURRENTLY AMENDED) A computer-readable storage storing a program for controlling a computer to execute, as a ~~perpetuation~~ an object to be operated singly, collaborating a plurality of information processors based on different architectures, by:  
storing information on a communication method between the information processors as collaboration information among the plurality of information processors;  
generating a role object as an active role with respect to one of the two information processors to be collaborated, and a role object as a passive role with respect to the other; and  
referring to the stored collaboration information and generating a relating object that allows transaction communication to be performed in accordance with the communication method between the two information processing means to be collaborated, thereby allowing a collaboration between the role object as the active role and the role object as the passive role.

18. (CANCELLED)

19. (PREVIOUSLY PRESENTED) The computer-readable storage according to claim 17, wherein the communication method is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.

20. (PREVIOUSLY PRESENTED) A computer-readable storage storing a program for controlling a computer to execute, as a perpetuation object to be operated singly, collaborating a plurality of information processors based on different architectures, by:

generating an information identification object that determines information to be stored in each of the plurality of information processors;

referring to collaboration information including at least information on a communication method between the information processors and generating a role object as an active role with respect to an information processor that is a data transmission origin, and a role object as a passive role with respect to an information processor that is a data transmission destination; and

referring to the stored collaboration information and generating a relating object for transmitting information to be stored in each of the information processors between the role objects, in accordance with a communication method between the information processor that is a data transmission origin and the information processor that is a data transmission destination.

21. (PREVIOUSLY PRESENTED) The computer-readable storage according to claim 20, wherein the collaboration information contains timing information on timing of passing of information between the plurality of information processors.

22. (PREVIOUSLY PRESENTED) The computer-readable storage according to claim 20, wherein the communication method is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.

23. (PREVIOUSLY PRESENTED) A collaboration apparatus between information processing systems for allowing a plurality of information processing means including information processing means based on different architectures to collaborate with each other, the apparatus being implemented as an object to be operated singly, and comprising:

role object generating means for generating a role object as an active role with respect to one of two information processing means to be collaborated, and a role object as a passive role with respect to the other; and

relating object generating means for referring to collaboration information and generating a relating object that allows transaction communication to be performed in accordance with a communication method between the two information processing means to be collaborated.

24. (NEW) An integrated information processing system integrating a plurality of information processors each having a storage, the system comprising:

a collaboration information storage that stores collaboration information on a communication method between the information processors; and

a data perpetuation object apparatus that refers to the stored collaboration information and performs a unified management of the data managed by the information processors.

25. (NEW) An integrated information processing system according to claim 24, the data perpetuation object apparatus object, further comprising:

an information identification object generator that generates an information identification object used in determining information to be stored in each of the storages of the information processors.

26. (NEW) An integrated information processing system according to claim 24, the data perpetuation object apparatus object, further comprising:

a role object generator that generates a role object as an active role with respect to an information processor that is a data transmission origin, and a role object as a passive role with respect to an information processor that is a data transmission destination.

27. (NEW) An integrated information processing system according to claim 24, the data perpetuation object apparatus object, further comprising:

a relating object generator that refers to the stored collaboration information and generates a relating object used in transmitting information to be stored in each of the storages of the information processors based on whether the information processor is a data transmission origin or a data transmission destination.